Technical Information

Beverage Stabilization SIHA® Activated Carbon FA



SIHA Activated Carbon FA fining agent from Eaton's Begerow Product Line is a purified activated carbon of vegetable origin that is capable of correcting color defects. The gentle activation process changes the inner surface of the carbon, making it specifically capable of adsorbing coloring substances.

SIHA Activated Carbon FA fining agent can be used for wines, sweet must, juices, spirits, and sugar solutions.

The specific advantages of SIHA Activated Carbon FA fining agent:

- It adsorbs undesired coloring substances in beverages that have turned brown or are intensely colored
- It has a large inner surface and therefore results a high adsorptive capacity
- It builds a compact turbidity depot thanks to good sedimentation

Application for Wine, Fruit Juice, Spirits

In order to use the full adsorptive power of SIHA Activated Carbon FA fining agent Eaton recommends that carbon fining will be carried out in the clarified and filtered beverage to prevent the turbidities from displacing the pores or surface of the activated carbon.

If used in combination with another fining agent, always add SIHA Activated Carbon FA first in order not to reduce the high adsorptive capacity of the carbon.

Eaton recommends that the quantity of SIHA Activated Carbon FA fining agent determined by a preliminary test be mixed to a paste with a small amount of the beverage in order to completely moisten the powder. Then add more beverage to the paste to allow a quantitative rinsing of the entire batch. Afterwards, it is necessary to stir vigorously to guarantee an even distribution of the product in the beverage. Depending on the action of the agitator, stir it for 10 to 20 minutes.

After approx. 1 hour, stir the beverage thoroughly once again to utilize the full adsorptive capacity of SIHA Activated Carbon FA fining agent. As the carbon develops its adsorptive power as soon as it is added, fining takes just a few hours.

Racking by filtration should follow after two days at the latest.

Quantities required

- For color correction of wines and juices that are intensely colored or have turned brown, a quantity of 1.67 – 3.34 lb/1,000 gal (20 – 40 g/hl)
 SIHA Activated Carbon FA fining agent is required.
- To improve the color of spirits,
 5.84 8.35 lb/1,000 gal (70 100 g/hl)
 SIHA Activated Carbon FA fining agent is required.
 The spirits should be qualified to drinking strength.
- To brighten intensely colored base wines for making sparkling wine, a quantity of 0.83 8.35 lb/1,000 gal (10 100 g/hl) is used, depending on the required degree of decolorization.
- Treatment of sugar solutions (approx. 60 °Brix) requires a quantity of 0.5 – 1.5% SIHA Activated Carbon FA fining agent by volume.
- The activated carbon dosage for wine treatment is limited to a maximum of 8.35 lb/1,000 gal (100 g/hl).

Application Beer

For the application in beer, pre-application tests are also recommended in order to determine the quantity required.

If the last wort is reused, color intensification may be expected. This can be counteracted by adding activated carbon to the last wort with a dosage of approximately 8.35 lb/1,000 gal (100 g/hl).

It is recommended to re-krausen beer which has been treated with activated carbon (approx. 20%) and to blend it with faultless beer depending on requirements. Add the carbon 5 – 7 days prior to filtration, preferably by turning over the tanks. This procedure can remove even more severe imperfections.





Pre-Application Test

The exact quantity of SIHA Activated Carbon FA fining agent is best determined by performing initial tests with 3.38 fl oz (100 ml) of the beverage. For this, a 5% suspension of SIHA Activated Carbon FA fining agent is prepared. The suspension is then pipetted to 3.38 fl oz (100 ml) of the beverage in increasing quantities.

0.007 fl oz (0.2 ml) of the 5% suspension per 3.38 fl oz (100 ml) beverage correspond to a quantity of 0.83 lb/1,000 gal (10 g/hl) of SIHA Activated Carbon FA fining agent.

The initial tests should be carried out according to the following table.

SIHA Activated Carbon FA suspension fl oz/gal (ml in 100 ml)	Corresponding quantity to be added to the beverage lb/1,000 gal (g/hl)
0.51 (0.4)	1.67 (20)
1.02 (0.8)	3.34 (40)
1.54 (1.2)	5.01 (60)
2.05 (1.6)	6.68 (80)
2.56 (2.0)	8.35 (100)

Stir the fining preparations with

SIHA Activated Carbon FA fining agent vigorously and then filter off through a pleated filter that has been sufficiently wetted beforehand. The first 0.34 fl oz (10 ml) of the filtrate is discarded. Finally, compare the filtrate with the initial sample. The exact quantity of SIHA Activated Carbon FA fining agent can be determined by comparing the colors of the two.

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Safety

If used properly and correctly no detrimental effects of SIHA Activated Carbon FA fining agent are known.

Further safety information can be found in the relevant Material Safety Data Sheet, which can be downloaded from our website.

Storage

SIHA Activated Carbon FA fining agent stores well. Due to the high adsorptive capacity of the carbon, it has to be stored in a dry, cool, well-ventilated and odorless room. Opened packages should be sealed tight and used up quickly.

Delivery Information

SIHA Activated Carbon FA fining agent is sold under article no. 63.102 and is available in the following package sizes:

33.06 lb (15 kg) paper bag
HS Customs Tariff: 3802 10 00

Certified Quality

SIHA Activated Carbon FA fining agent complies with all pertinent legal requirements. It is monitored constantly during the production process to ensure consistently high quality. These inspections cover technical function criteria as well as approval in accordance with the law governing the production and sale of foodstuffs. Strict controls are carried out immediately before and during final packing.

For more information, please e-mail us at filtration@eaton.com or visit us online at eaton.com/filtration for a complete list of Eaton's filtration products.

Not all products in Eaton's Begerow Product Line are available in all regions. Please contact your local Eaton Filtration office to determine availability.

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